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## **CLAIMS**

- A deformable-mirror holder comprising a body with a central aperture for receiving a deformable mirror, the central aperture being defined by a plurality of flexible beams, with each flexible beam having an end shaped to provide a supporting surface and a flexible portion that connects the beam's end to the holder's body.
- A deformable-mirror holder according to claim 1, wherein the ends of the
   flexible beams are co-joined to form a unitary structure shaped to provide a supporting surface.
  - 3. A deformable-mirror holder according to claim 1 or claim 2, wherein the beams' ends lie in the plane of the holder's body such that, in use, the mirror is received within the holder's body.
  - 4. A deformable-mirror holder according to any of claims 1 to 3, wherein at least one beam is generally L-shaped such that one leg of the L-shape provides the flexible portion and the other leg of the L-shape provides the supporting surface of the beam's end.
  - A deformable-mirror holder according to claim 4, wherein the internal corner
    of the L-shaped beam has a shoulder that extends part of the way along
    both legs of the L-shape.
  - 6. A deformable-mirror holder according to any preceding claim, wherein the plurality of flexible beams are arranged around the entire aperture.

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- 7. A deformable-mirror holder according to claim 6, wherein the width of the beams is larger than the separation between beams.
- 8. A deformable-mirror holder according to claim 7, wherein the width of the beams is greater than four times the separation between beams.
  - 9. A deformable mirror and a deformable-mirror holder according to any preceding claim.
- 10. A deformable mirror and a deformable-mirror holder according to claim 4, wherein the peripheral edge of the mirror is supported from below by one leg of the L-shaped beam and is supported from the side by the other leg of the L-shaped beam.
- 15 11.A deformable mirror and a deformable-mirror holder according to claim 5, wherein the peripheral edge of the mirror is supported from below by one leg of the L-shaped beam and is supported from the side by an inwardly-facing side of the shoulder.
- 12. A deformable-mirror holder as substantially described hereinbefore with reference to any of Figures 4 to 17 of the accompanying drawings.
  - 13.A deformable mirror and a deformable-mirror holder as substantially described hereinbefore with reference to any of Figures 4 to 17 of the accompanying drawings.